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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,249	08/29/2001	Balazs Kralik	RAP0008US	6169
33031 7590 03/22/2007 CAMPBELL STEPHENSON ASCOLESE, LLP 4807 SPICEWOOD SPRINGS RD. BLDG. 4, SUITE 201 AUSTIN, TX 78759			EXAMINER VAN DOREN, BETH	
			ART UNIT	PAPER NUMBER
			3623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/942,249	KRALIK ET AL.	
	Examiner	Art Unit	
	Beth Van Doren	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20060823,20060821</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a non-final office action in response to communications received 12/20/06. Claims 1-2 and 4-21 are pending in this application.

Response to Amendment

2. Applicant's amendments to the specification are sufficient to overcome the specification objections set forth in the office action of 02/15/2006.

Response to Arguments

3. Applicant's arguments with regards to the 35 USC § 112, first paragraph, rejections set forth in the office action of 02/15/2006 have been fully considered and are persuasive.

Therefore, this grounds of rejection has been withdrawn.

4. Applicant's arguments with regards to the 35 USC § 101 rejections set forth in the office action of 02/15/2006 have been fully considered and are persuasive. Therefore, this grounds of rejection have been withdrawn. However, new 35 USC § 101 rejections have been established below.

Claim Objections

5. Claims 1 is objected to because of the following informalities: Claim 1 recites "estimating of a", which should more appropriately be estimating a. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-2 and 3-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitations “said increased component plan” and “said decreased component plan”. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, these limitations have been construed as an increased component plan and a decreased component plan. Clarification is required.

Claim 14 also recites the limitations “said increased component plan” and “said decreased component plan”, and therefore has the same deficiencies as claim 2. Clarification is required.

Claims 15-21 depend from claim 14 and therefore contain the same deficiencies as claim 14. Further, claims 15-16 recite “an increased component plan” and “a decreased component plan” and, therefore, it is not clear if they are referring the same increased and decreased component plans as claim 14. Clarification is required.

Further, claim 1 recites “estimating a component gating risk” in the first step and “calculating said component gating risk” in the last step. It is unclear what the relationship is between these two steps since the term estimation involves an approximation whereas calculation is an actual computation of a determined value. Clarification is required.

Claims 2 and 14 recite similar subject matter to claim 1 and therefore contain the same deficiencies.

Claims 3-13 and 15-21 depend from claims 1 and 14, respectively, and therefore contain the same deficiencies as claims 1 and 14, respectively.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-2 and 4-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed towards non-statutory subject matter. For a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. *State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02.*

In the present case, claim 1 is not tangible. In order to be a tangible, a claim must produce a real world result. Claim 1 recites estimating a gating risk by computing a mean production value and computing a gating risk. However, neither of these steps produces a real world result, as values are merely computed. Further, while the preamble recites a “computer implemented method”, neither of the steps are specifically tied to a computer which performs the computing.

Claim 2 recites similar subject matter to claim 1 and therefore contains the same deficiencies.

Claims 4-13 depend from claim 1 and therefore contain the same deficiencies as claim 1.

Claim 14 recites instructions for computing a mean production value for each of an increased and decreased plan and computing a gating risk. However, this produces no real world

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result, since the values are merely computed and are stored, displayed, or used in any real world manner.

Claims 15-21 depend from claim 14 and therefore contain the same deficiencies as claim 14.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-2 and 4-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang et al. (U.S. 6,263,253).

As per claim 1, Yang et al. teaches a computer-implemented method comprising:

estimating a component gating risk in a manufacturing process, comprising computing a mean production value using an altered component plan (See column 2, lines 42-55 and 65-67, column 3, lines 20-30 and 50-55, wherein a mean production value (an average processing time) is computed for a machine production line, wherein the allocations in the line can be altered and reexamined. See also column 4, lines 32-47); and

computing said component gating risk using said mean production value (See column 2, lines 50-60, column 3, lines 10-30 and 40-50, where it is computed, using the average processing time, if there is a risk of a bottleneck which effects output of the system).

As per claim 2, Yang et al. teaches a computer-implemented method comprising:

estimating a component gating risk in a manufacturing process, comprising computing a first mean production value using an increased component plan (See column 2, lines 40-55 and 65-67, column 3, lines 4-20, wherein WIP flow is increased and the effects are determined);

computing a second mean production value using an decreased component plan (See column 2, lines 40-55 and 65-67, column 3, lines 20-30 and 40-50, wherein WIP flow is decreased and the effects are determined); and

computing said component gating risk using said first and said second mean production values (See column 2, lines 50-60, column 3, lines 10-30 and 40-50, where it is computed, using processing time considerations, if there is a risk of a bottleneck which effects output of the system).

As per claim 4, Yang et al. teaches wherein said estimating further comprises generating an altered component plan by altering a component plan for a component (See column 2, lines 42-55 and 65-67, column 3, lines 20-30 and 50-55, wherein the allocations in the line can be altered and reexamined. See also column 4, lines 32-47).

As per claim 5, Yang et al. teaches wherein said altered component plan is generated by altering a component plan for a component (See column 1, lines 40-50, column 2, lines 1-20, and column 3, lines 20-30, wherein a component (WIP) is being sent through the production line).

As per claim 6, Yang et al. teaches wherein said component is a component used in said manufacturing process (See column 1, lines 14-21 and 40-50).

As per claim 7, Yang et al. teaches wherein said estimating further comprises generating an increased component plan (See column 2, lines 40-55 and 65-67, column 3, lines 4-20, wherein the WIP flow is increased).

As per claim 8, Yang et al. teaches wherein said estimating further comprises generating a decreased component plan (See column 2, lines 40-55 and 65-67, column 3, lines 20-30 and 40-50, wherein WIP flow is decreased).

As per claim 9, Yang et al. teaches wherein said increased component plan is generated by increasing a component plan for a component (See column 2, lines 40-55 and 65-67, column 3, lines 4-20, wherein the WIP flow is increased), and

said decreased component plan is generated by decreasing said component plan for said component (See column 2, lines 40-55 and 65-67, column 3, lines 20-30 and 40-50, wherein WIP flow is decreased).

Claim 10 recites substantially similar limitations to claim 6 and is therefore rejected using the same art and rationale set forth above.

As per claim 11, Yang et al. teaches wherein said estimating further comprises generating said component plan for said component (See column 2, lines 40-55 and 65-67, column 3, lines 4-20, and column 4, lines 25-40, wherein a plan is generated).

Claims 12 and 13 recite substantially similar limitations to claims 9 and 6, respectively, and are therefore rejected using the same art and rationale set forth above.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (U.S. 6,263,253) in view of Martin (U.S. 6,259,959).

As per claim 14, claim 14 recites substantially similar limitations to claim 2 and is therefore rejected using the same art and rationale set forth above. Claims 15-21 recite substantially similar limitations to claims 7-13, respectively, and are therefore rejected using the same art and rationale set forth above. However, Yang et al. does not expressly disclose computer instructions or computer readable media.

Martin discloses a computer system with computer instructions or computer readable media (See column 2, lines 1-15, column 9, lines 40-55, which discloses the computer environment).

Both Martin and Yang et al. disclose production line analysis to see what aspect is constraining the workflow. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a computer environment in the method of Yang et al. in order to more efficiently process the data associated with the production line.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dietrich et al. (U.S. 5,548,518) teaches production scheduling using materials requirements and capacity constraints.

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Smith (U.S. 6,876,948) teaches mean time and average production with manufacturing, and further considers likelihood of a shortage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is 571-272-6737. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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March 16, 2007

Beth Van Doren
AU 3623
Patent Examiner